

RECEIVED
PA SECTION

JUL 9 1987

EPA, R3

Department of Environmental Resources

1875 New Hope Street
Norristown, Pennsylvania 19401
215-270-1948

July 1, 1987

Mr. James Hogeboom
Eastern Gas and Fuel Associates
P. O. Box 6561
Mesa, Arizona 85206

Dear Mr. Hogeboom:

It is our conclusion that the Philadelphia Coke facility which was a hazardous waste surface impoundment facility located in the City of Philadelphia will have to be closed to the Department's satisfaction. Our Regional Hydrogeologist, Sarah Ginzler, observed some test pit excavations at the site on June 24, 1987. There has been waste deposited on the site from the surface impoundments from a depth of approximately 3 ft. to a depth of 10 ft. in an area where surface impoundments were located.

I believe you have advanced other processes for getting rid of the waste such as a land farming facility on-site and on-site incineration with a mobile hazardous waste incinerator unit. These two items at the present time will not be acceptable because all land farming facilities must have hazardous waste permits by November 8, 1988, which means it would be virtually impossible to have a permit by then if an application has not been submitted at the present time. I know of no hazardous waste mobile incinerator units under permit which could be utilized for on-site incineration; however, I believe we have made the suggestion that the waste from this facility could be taken to Rollins in New Jersey where they have a hazardous waste incinerator. Treatment in situ would also be quite difficult because this would also require a hazardous waste Part B permit.

Therefore, it is our feeling that you should complete closure of this site in accordance with your closure plan which means that all contaminated waste and contaminated soil from the site which is over and above background levels should be removed to be deposited at an approved landfill site. If portions of the contaminated soil are found to be nonhazardous, it can be disposed of at Pennsylvania permitted landfill sites provided these sites have the proper leachate collection systems and they are lined.

If you decide you wish to leave the waste in place, it will be necessary for you to make application for a Department of Environmental Resources post closure permit which means the application must include provisions for monitoring the site for 30 years and the bond amount of \$960,000.00 would increase dramatically because the bond must cover the cost of maintenance of this site and monitoring for a 30-year post closure period.

Mr. James Hogeboom

July 1, 1987

- 2 -

You will have to let the Department know by July 15, 1987, which way you wish to proceed. This means whether you wish to proceed on a course of clean closing the facility which involves removal of all contaminated waste and contaminated soil over and above background levels, or you must decide whether you want to pursue a post-closure permit application. If we do not hear from you by July 15, 1987, we will have no choice but to proceed with legal sanctions against your company. If you have any questions concerning proper closure of this site, you may contact me at (215) 270-1948.

Very truly yours,

LAWRENCE H. LUNSK

Regional Waste Management Facilities Supervisor

cc: Mr. Richard Zipin, Phila. Health Dept.

Mr. Sam Isreal - EPA, Philadelphia -

Mr. Joe Hayes

Mr. Leon Kuchinski

Mr. G. Danyliw

Re 30 SW181.2



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

1875 New Hope Street
Norristown, Pennsylvania 19401
215-270-1948

October 31, 1986

RECEIVED
PA SECTION

NOV 13 1986

Mr. Peter Jacobson
Woodward Clyde Consultants
5120 Butler Pike
Plymouth Meeting, PA 19462

Dear Mr. Jacobson:

On October 15, 16, and 17, 1986, our regional hydrogeologist, Sara Ginzler, and our solid waste specialist, Mike Bobek, monitored a soil sampling program at the Philadelphia Coke Company facility which is currently undergoing closure for hazardous waste surface impoundments. You and Mr. Bob Gibson represented Woodward Clyde Consultants. The drillers were H. P. Drilling from National Park, New Jersey. Monitoring well nos. 5 and 6 were installed.

Soil samples were taken from borings inside and next to the filled decanter tar lagoons, the waste liquor pit and the lime pit area. Several borings were abandoned after drilling into concrete. The exact locations of former waste management units still have to be found. Your company had stated that the Philadelphia Coke Company owns Blue Line maps of the site which are not available to us. The following contamination was noted when collecting the split spoon samples:

1. Inside lagoon #1 - 4 to 6 foot interval, oil dripping from split spoon sampler; 6 to 8 foot interval, sample very oil rich, oil dripped over the driller's tyvek suit and boots; 8 to 10 foot interval, sample very oily down to the clay layer which appears to be competent.
2. Inside lagoon #2 - 4 to 6 foot interval, sample smelled of coal tar but did not drip oil; we collected one sample to be taken to our DER lab.
3. Outside lagoon #3 - 10 to 12 foot interval, sample very tarry in appearance; 12 to 14 foot interval, about 3" of coal tar (product on spoon); we took a sample below the tar at the 13' level. At this point it was agreed not to drill through the underlying clay layer. The driller removed hardened coal tar from the split spoon and auger and acetone scrubbing and steam cleaning solution. Your company took field blanks before and after the decontamination procedure.
4. Outside waste liquor pit - 6 to 8 foot interval, very dark oily sample; 8 to 10 foot interval, very oily sample which smelled of tar.
5. Inside lime pit #5 - 2 to 4 foot interval, indurated hardened lime layer about 3" thick; 4 to 6 foot interval, very soft sticky clay layer.

Mr. Peter Jacobson

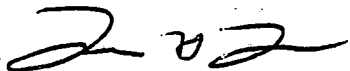
October 31, 1986

- 2 -

It is our conclusion that the Philadelphia Coke Company must provide this Department and EPA with accurate maps of the site in order to locate accurately the former waste management units. The former waste management units which were covered in the Part A application which was withdrawn when the closure plan was submitted are the units which have to be certified closed. Anything else on the site which is a solid waste management unit would have to be covered under a corrective action program in compliance with the 1984 RCRA amendments. Once the maps are submitted a determination must be made and we must be in agreement with the Philadelphia Coke Company concerning how much contaminated soil and waste will be removed from the site.

If you have any questions concerning the soil sampling program and certification of closure, you may contact either myself or Sara Ginzler at 270-1948.

Very truly yours,



LAWRENCE H. LUNSK

Regional Waste Management Facilities Supervisor

cc: Philadelphia Health Dept.-Mr. Dick Sippen

Mr. Danyliw

Mr. Sam Israel-EPA, Philadelphia ✓

Mr. Joe Hayes

SW302.8

ER-NOR-11:9/84

TJW

DATE: 09-19-86		FROM: Norristown
	BETHLEHEM	
	BUCKS CO. HEALTH	
	CHESTER CO. HEALTH	
	DELAWARE CO. OFFICE	
	PHILADELPHIA CO. HEALTH	
	READING	
	LITIGATION—Philadelphia	
✓	EPA—6th & WALNUT	S. Brael
HARRISBURG		
Building		
Floor		
Bureau		
Person		
Message:		

TSD

EPA -
Greg Koltonuk



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

1875 New Hope Street
Norristown, PA 19401
215-270-1948

CERTIFIED MAIL NUMBER P495 459 798

May 22, 1990

file

Mr. John Hancock
c/o Ohio River Company
580 Walnut Street
Suite 1400
Cincinnati, OH 45202

Re: Philadelphia Coke Meeting **CO. INC.**
PAD 000427906

Dear Mr. Hancock:

The Department would like to conduct a meeting with you, Mr. John T. McKenna, and Mr. James Husted (Woodward-Clyde) to discuss a number of issues relating to the Philadelphia Coke site closure.

Please make arrangements to attend this meeting to be held on June 12, 1990 at 9:00 a.m. The meeting will be held at the Department's regional offices located at the intersection of Routes 202 and 422 (Germantown Pike) in the Northtowne Plaza shopping center in Norristown, PA.

There are two main issues which need to be discussed during this meeting: the RCRA/hazardous waste closure, and the non-hazardous waste/residual waste closure of the site. A number of technical, closure schedule, and offsite waste disposal issues should be resolved, as well.

Mr. John Hancock
May 22, 1990

-2-

Please confirm your attendance at this meeting, in writing, as soon as possible; if you wish to FAX your response, our FAX number is 215-270-1634. Thank you for your involvement with this important meeting, and we are looking forward to meeting you at that time. If you have any questions, please feel free to call me at 215-270-1651, or Mr. Bruce Beitler, Solid Waste Operations Manager, at 215-270-1948.

Very truly yours,

Robert Zang
Waste Management Specialist

cc: USEPA/RCRA Enforcement
Division of Compliance & Monitoring/Mr. Kuchinski
Philadelphia Health Dept./EE - R. Zipin
Mr. Law, Esq.
Mr. McKenna
Mr. Husted
Mr. Beitler
Mr. Lunsik
Ms. Pantelidou
Ms. Kurtz
Mr. Zang (2)
Re la907



Philadelphia Coke Co., Inc.
4501 Richmond Street
Philadelphia, Pennsylvania 19137
(215) 743-3100

July 22, 1987

Pennsylvania Department of
Environmental Resources
1875 New Hope Street
Norristown, PA 19401

Attention: Mr. Lawrence Lunsik
Regional Waste Management Facilities Supervisor

Dear Mr. Lunsik:

This letter is in response to your letter dated July 1, 1987 regarding the former hazardous waste management facilities at the Philadelphia Coke Plant in Philadelphia, Pennsylvania. Philadelphia Coke has given due consideration to your suggestions and is proposing a course of action to meet our mutual objectives. We recognize the administrative need to obtain closure of the former lagoon prior to November, 1988 as an important objective of this program. However, several other objectives also need to be met:

1. Closure of the facilities needs to be performed in a manner that will minimize overall environmental risks.
2. Current regulatory philosophies in hazardous waste management at both state and federal levels favor and encourage technologies which ultimately destroy or detoxify wastes rather than moving them to another location. This is exemplified by USEPA's land disposal ban for K-listed wastes, due to take effect in August 1988.
3. Incineration is not appropriate as a site remediation approach, as it is most applicable to small volumes of highly concentrated wastes, not large amounts of moderately contaminated soils.

We have evaluated several remedial alternatives which are applicable to the site of the former lagoon. These alternatives include: landfilling, incineration, on-site landfarming, in-situ

biotreatment, and leaving the wastes in place. Our evaluation has considered several criteria, including technical viability, time and space requirements, long-and short-term risks, and costs. Our proposed approach, described below, is based on the results of this evaluation.

Our recommended program entails several steps to meet the objectives described above. The following provides a basic outline of the program; further details will be forthcoming at a later date.

1. The soils in the area around the former lagoon will be excavated. At the time of excavation, a segregation of materials will be made to separate the pure phase tars and highly concentrated wastes from the less contaminated soils. After excavation, the area will be backfilled with clean materials.
2. Highly contaminated soils, concentrated wastes and pure tars will be appropriately containerized, manifested, and sent to a secure landfill for disposal.
3. Less contaminated soils (presumably at levels above background concentrations) will be stored in a temporary storage area to be constructed on-site. This temporary storage area will be located on an impermeable base and have roof coverage to eliminate any rainfall infiltration, leachate generation, or groundwater discharge during the period of storage.
4. A land treatment unit will be constructed in a designated portion of the Philadelphia Coke property. This land treatment facility ("landfarming") will require the completion and approval of a RCRA Part B Permit prior to operating. The application for this facility is currently being prepared. Also, a pilot-scale program is planned to help refine some of the design parameters for the landfarming operation. Landfarming has been shown to be effective for treatment of soils contaminated with coal tar-related compounds. Analytical data from the Philadelphia Coke site soils indicate high naphthalene concentrations relative to other coal tar-related contaminants. This balance of coal tar-related contaminants should help

Pennsylvania Department of
Environmental Resources
July 22, 1987
Page Three

induce adequate rates of microbiological degradation, thereby enhancing the landfarming performance on the treatment of the contaminated soils. For additional background, a list of references related to microbiological treatment of coal tar and related wastes is attached.

We hope that you will give this innovative program your approval and, in fact, we would be very pleased if your Department would agree to work with us in developing and executing the program. If such a cooperative effort were to be successful, we believe your Department would find the technology useful at other similar coke plant sites where coal has been converted to coke for town gas production or for steel making.

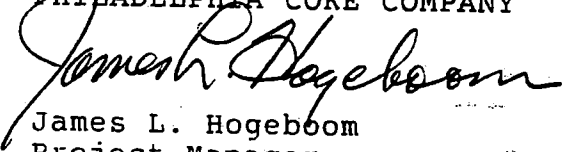
The demonstration of the technology at our site would allow the Department to recommend a proven technology that eliminates landfilling by destroying the hazardous materials in an environmentally and economically acceptable manner. With the technology developed, demonstrated, and improved upon, the time requirements for execution at other sites could be foreshortened and the PADER could meet its objectives in far less time.

We are anxious to move ahead on this program and are currently preparing the Part B Application. We anticipate submittal of the application in September, 1987. We would appreciate your preliminary approval of the concept of developing a temporary storage area and pilot treatment program prior to your formal review of the Part B, so that work can begin soon.

If you have any questions about this material, we would be pleased to meet with you at your earliest convenience. In the meantime, please do not hesitate to call.

Very truly yours,

PHILADELPHIA COKE COMPANY


James L. Hogeboom
Project Manager

/dn
Attachment

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ER-NOR-11:9/84

DATE: 7-1-87		FROM: L. LunsK
	BETHLEHEM	
	BUCKS CO. HEALTH	
	CHESTER CO. HEALTH	
	DELAWARE CO. OFFICE	
	PHILADELPHIA CO. HEALTH	
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PHILA COKE CO INC
PAD 000427906

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PA



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

1875 New Hope Street
Norristown, Pennsylvania 19401
215-270-1948

September 18, 1986

Mr. Peter R. Jacobson
Project Manager
Woodward-Clyde Consultants
5120 Butler Pike
Plymouth Meeting, Pennsylvania 19462

Dear Mr. Jacobson:

We have completed our review of information submitted concerning certification of closure for the hazardous waste surface impoundments located at the Philadelphia Coke Company in the City of Philadelphia.

We have reviewed the revised plan for soil sampling work dated August 27, 1986, submitted by your company. We approve the work plan with the following clarification which was confirmed in a telephone conversation between Sarah Ginzler and yourself on September 3, 1986:

Revision No. 3 - The soil sample is to be taken outside of the earthen decanter lagoon, may be taken below a clay layer depending on the layer's thickness as determined in the field. Please notify Sarah Ginzler ahead of time when a date has been set for this work.

We have reviewed the addendum which was received on August 29, 1986, concerning the groundwater monitoring system. Monitoring wells W-5 and W-6 should be drilled at the same time. These two wells should provide needed information on groundwater flow directions and will confirm the presence or absence of a sewer line effect on monitoring well W-4. This would also avoid fees for a second driller to come out to the site.

If you have any remaining questions on what was reviewed, you may contact Sarah Ginzler at 270-1948. If you have no remaining questions, you may complete this work and it should put you in a position to certify that this facility has been properly closed in accordance with the addendums to the approved closure plan.

Very truly yours,

LAWRENCE H. LUNSK
Regional Waste Management Facilities Supervisor

cc: Mr. Joe Hayes
Mr. Sam Isreal-EPA, Philadelphia ✓
Mr. Richard Zipin-Phila. Health Dept.
Mr. Danyliw
SW260.6

Eugene Dennis

RECEIVED

SEP 03 1986

Pennsylvania RRA Enforcement
Section - EPA - Region III

**Work Plan
Soil Sampling Program
Philadelphia Coke Plant
Philadelphia, Pennsylvania**

Woodward-Clyde Consultants



Consulting Engineers, Geologists and Environmental Scientists
5120 Butler Pike, Plymouth Meeting, Pennsylvania 19462

5120 Butler Pike
Plymouth Meeting
Pennsylvania 19462
215-825-3000
Telex 846-343

DER RECEIVED
NORRISTOWN

Woodward-Clyde Consultants

August 27, 1986
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AUG 29 1986

RECEIVED

Bureau of Waste Management
Pennsylvania Department of Environmental Resources
1875 New Hope Street
Norristown, Pennsylvania 19401

SEP 03 1986

Pennsylvania Department of Environmental Resources
Section - EPA Region III

Attention: Ms. Sara Ginzler

Re: Soil Sampling Program
Philadelphia Coke Plant

Dear Ms. Ginzler:

On behalf of Philadelphia Coke Co., Woodward-Clyde Consultants is hereby submitting the enclosed revised Work Plan for your review. The Work Plan documents procedures for a soil sampling program related to closure of the hazardous waste facilities at the plant.

Please note that the soil sampling program described in this Work Plan is based on: 1) technical conversations with Mr. Philip Rotstein, formerly of your staff; 2) DER's comments in your June 12, 1986 letter; and 3) discussions during our meeting on August 4, 1986. A revisions sheet is attached to this letter, summarizing the changes since our original submittal.

Philadelphia Coke and WCC are prepared to begin work on this program upon receipt of DER's approval. Please call if you have any questions.

Very truly yours,

WOODWARD-CLYDE CONSULTANTS

Peter R. Jacobson

Peter R. Jacobson
Project Manager

PRJ/vbg/WM 27A
Attachments

cc: James Hogeboom

Consulting Engineers, Geologists
and Environmental Scientists

Offices in Other Principal Cities



REVISIONS SHEET
WORK PLAN REVISION NO. 1
AUGUST 27, 1986

1. The soil sampling program consists of five general locations, increased from three, by the addition of:

- o Waste liquor pit
- o Underground storage tank area

Note that soil sampling conducted in the underground storage tank area will be performed in conjunction with removal of those tanks.

2. The 2 samples from the base of the concrete decanter pits will be submitted for analysis (not dependent on visual inspection).
3. One of the sampling locations previously identified for the decanter lagoon may be moved to outside the lagoon, dependent on field conditions.
4. One additional sample will be collected from the Tar Plains. All three locations there will be determined by random-node selection on a three-by-three grid.
5. All soil samples collected will be subjected to OVA/OVM headspace readings; these data will be recorded on the boring logs.
6. One background soil sample will be collected from soils an undisturbed portion of the plant site.
7. One sample blank will be collected using distilled water.

1875 New Hope Street
Norristown, Pennsylvania 19401
215-270-1948

June 12, 1986

Mr. Peter R. Jacobson
Project Manager
Woodward-Clyde Consultants
5120 Butler Pike
Plymouth Meeting, PA 19462

RECEIVED
PA SECTION

JUN 17 1986

EPA, 50

Dear Mr. Jacobson:

We have completed our review of the work plan submitted involving a soil sampling program at the Philadelphia Coke Plant in conjunction with the implementation of an approved closure plan for closing the impoundments at this facility. Our comments on this work plan will read as follows:

- ✓ 1. All soil samples collected during continuous split spoon sampling should be monitored with an HNU photo-ionizer or an organic vapor analyzer (OVA). The results of this monitoring should be documented.
- ✓ 2. The soil samples collected from the base of the two concrete pits should be submitted for analysis. A visual inspection of these samples should not be relied upon to determine if these soils contain hazardous constituents. These samples should also be monitored with an HNU or OVA prior to submittal for chemical analysis.
- ✓ 3. Two soil borings rather than 1 should be drilled immediately outside the two concrete pits and the excavated decanner tar bottoms lagoon. One of these should be near monitoring well no. 2 and one at the western or downgradient end of the concrete pit. Soil monitoring with an HNU or OVA should also be conducted during the drilling of these bore holes.
- ✓ 4. A soil sample should be collected from the base of the waste liquor pit at a depth of approximately 10 feet. Soil monitoring with an HNU or OVA should be conducted during the drilling of this bore hole.
- ✓ 5. For sampling in the tar plains, a 3x3 grid of location should be developed, and four of the nine locations chosen, (using random number generation) for soil sampling.
6. Soil samples should also be taken at the iron oxide storage shed, the underground storage tank area, and near the dismantled tar storage tanks.

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Butler
addressed ✓

1 sample
will be
collected ✓

Mr. Peter P. Jacobson

June 12, 1986

-2-

- ✓ 7. The soil program does not discuss any sample blanks. At least one field blank should be submitted for analysis. A background sample must also be taken from an undisturbed area of the property where no waste was deposited.

This concludes our review of this work plan. Please submit two (2) copies of your response to this letter including the necessary revisions in the work plan for soil sampling at the Philadelphia Coke Plant. Once we have received and approved your response, the work plan can be immediately implemented. If you have any other questions concerning our review of this work plan, you may contact Sara Ginzler of this office at 270-1948.

Very truly yours,

LAWRENCE H. LUNSK

Regional Waste Management Facilities Supervisor

cc: Mr. Joe Hayes

Mr. Sam Isreal--EPA, Phila. ✓

SW162.2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III

841 Chestnut Building
Philadelphia, Pennsylvania 19107

In Reply Refer To: 3HW11

MAY 08 1986

Sarah Ginzler, Hydrogeologist
Pennsylvania Department of
Environmental Resources
1875 New Hope Street
Norristown, PA 19401

Re: Soil Sampling Program
Philadelphia Coke Co.
PAD 00 042 7906

Dear Sarah:

I have completed my review of the soil sampling program, developed by Woodward-Clyde Consultants for Philadelphia Coke Company. Based on this review I have generated comments which address my concerns with the program. Please incorporate these comments into your review letter and forward to Philadelphia Coke Company and their consultant.

- ° All soil samples collected during continuous split spoon sampling should be monitored with an HNU photoionizer or an organic vapor analyzer (OVA). The results of this monitoring should be documented.
- ° The soil samples collected from the base of the two concrete pits should be submitted for analysis. A visual inspection of these samples should not be solely relied upon to determine if these soils contain hazardous constituents. These samples should also be monitored with an HNU or OVA prior to submittal for chemical analysis.
- ° The soil boring to be completed immediately outside the two concrete pits should be near monitoring well #2, as this well has the highest concentrations of organic compounds. Soil monitoring with an HNU or OVA should also be conducted during the drilling of this hole.

° Consideration should be given to collecting a soil sample from the Waste Liquor Pit. This sample should be collected from the base of this pit, at a depth of approximately 10 feet. Soil monitoring with an HNU or OVA should also be conducted during the drilling of the borehole.

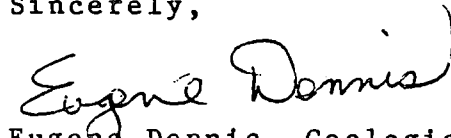
° The locations for the soil samples to be collected at the tar plains should be concentrated on know contaminated areas or areas where the tar plains are well defined as trash was also disposed of in this section of the plant. Also, I suggest collecting more than two (2) soil samples from this area and possibly developing a grid to determine sample locations.

° Additional soil sampling locations should be considered and would include the iron oxide storage area, the underground storage tank area and near the dismantled tar storage tanks.

° The soil program does not discuss any sample blanks. I suggest that at least one field blank be submitted for analysis.

The results of this preliminary study should determine what areas of the Philadelphia Coke Plant property are contaminated. Based on these results, a more extensive soil sampling program may be warranted. EPA Region III would like to see this soil sampling program be implemented sometime in late May or early June, 1986. If you have any questions about the above comments call me at 597-8555.

Sincerely,



Eugene Dennis, Geologist
PA RCRA Enforcement Section

cc: Harry Harbold (3HW11)

5120 Butler Pike
Plymouth Meeting
Pennsylvania 19462
215-825-3000
Telex 846-343

Woodward-Clyde Consultants

April 15, 1986
84C2145A

Bureau of Waste Management
Pennsylvania Department of Environmental Resources
1875 New Hope Street
Norristown, Pennsylvania 19401

Attention: Mr. Bruce Beitler

Re: Soil Sampling Program
Philadelphia Coke Plant

Gentlemen:

On behalf of Philadelphia Coke Co., Woodward-Clyde Consultants is hereby submitting the enclosed Work Plan for your review. The Work Plan documents procedures for a soil sampling program related to closure of the hazardous waste facilities at the plant.

Please note that the soil sampling program described in this Work Plan is based on technical conversations with Mr. Philip Rotstein, formerly of your staff. At our meeting at the site on January 16, 1986, he concurred with the numbers and locations of samples described in this Work Plan.

Philadelphia Coke and WCC are prepared to begin work on this program upon receipt of DER's approval. Please call if you have any questions.

Very truly yours,

WOODWARD-CLYDE CONSULTANTS



Peter R. Jacobson
Project Manager

PRJ/rnm/WM27

cc: James Hogeboom



**WORK PLAN
SOIL SAMPLING PROGRAM
PHILADELPHIA COKE PLANT
PHILADELPHIA, PENNSYLVANIA**

submitted to:

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

Norristown, PA

Prepared by:

WOODWARD-CLYDE CONSULTANTS

Plymouth Meeting, Pennsylvania

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INTRODUCTION

This document is a work plan for performance by Woodward-Clyde Consultants (WCC) of a soil sampling program at the Philadelphia Coke Plant in Philadelphia, Pennsylvania. The plant is currently inactive, having undergone dismantling and removal of most of the pre-existing facilities and structures. As part of its decommissioning procedures, and in accordance with a formal Closure Plan approved by the Pennsylvania Department of Environmental Resources (PDER), the former hazardous waste management facilities at the plant were closed by removing all hazardous materials. All wastes removed from these facilities were transported off-site for disposal.

The purpose of the soil sampling program is to evaluate the presence or absence of residual hazardous materials in the subsurface near the previous hazardous waste facilities at the plant. The soil sampling program is intended to be preliminary in that it is designed to identify the presence or absence of hazardous materials, not quantify the amounts or delineate the extents, if present.

The soil boring program will collect samples from three general locations around the plant site. The specifics of sampling locations, numbers, and methods are described below for each general location and listed in Table 1. In addition, this work plan documents the laboratory and QA/QC procedures to be followed for this program. Note that this sampling program is designed to investigate relatively shallow soils, found in the fill zone above the clay unit, at a depth of 10 to 15 feet below the surface.

SOIL SAMPLING

The soil sampling program consists of sampling and analysis of soils collected from three locations at the plant:

1. The decanter tar bottoms area ✓
2. The tar plains ✓
3. The lime pit

A brief description and the sampling rationale for each area are provided below.

DECANTER TAR BOTTOMS AREA

This area consists of two concrete pits, each approximately 10 feet wide, 12 feet long, and 8 feet deep, and an excavated lagoon approximately 15 feet wide, 75 feet long, and 8 to 10 feet deep. Each of these areas has been excavated and backfilled with clean fill. The soil boring program will consist of four borings spaced approximately equidistant along the center line of the lagoon area. Continuous split-spoon sampling will be conducted from the surface to the top of the clay, at a depth of approximately 10 to 12 feet. The boreholes will be logged visually for descriptions of the types of materials encountered in the subsurface. Samples for chemical analysis will be collected at the interface between the fill and natural materials, if identifiable, and at a depth interval between the first sample and the top of the clay. If the interface between natural and fill materials is not readily identifiable, the first samples for analysis will be collected at approximately 8 feet. With two samples from each borehole, there will be a total of eight samples for analysis from the lagoon area.

For the two concrete pits, one borehole will be drilled through or into each of the pits. The purpose of these boreholes will be to ascertain if all hazardous materials have been removed from the pits. Continuous split-spoon samples will be collected from these boreholes, and the samples will be visually logged. Since any residual hazardous materials left in the pits would be at the bottoms of these two pits, the bottom samples will be scrutinized closely. A field decision will be made as to whether the bottom samples need to be submitted for chemical analysis. The boreholes in the pits will be drilled to the top of the concrete floor of the pits.

One borehole will be drilled in a location immediately outside the two concrete pits. The purpose of this borehole will be to assess if any hazardous materials escaped from the pits and are now present in the subsurface in the surrounding area. One sample for chemical analysis will be collected at a depth of approximately 8 feet, just below the bottoms of the pits.

TAR PLAINS

Two borings will be performed in the tar plains area on the southeastern side of the plant site. These two borings will be approximately equidistant along the southern-central side of the tar plains area. These two borings will be performed by hand tools and will be extended to a depth of approximately 18 inches. From each boring, one composite sample for chemical analysis will be taken over a depth range of 6 inches to 18 inches below grade.

LIME PIT

One boring will be performed in the lime pit area along the western side of the plant. This boring will be drilled to a depth of approximately 10 feet or to the top of clay. Two samples from this boring will be submitted for chemical analysis: one from the bottom of the boring and one from a depth approximately equidistant between the surface and the bottom.

SUMMARY AND GENERAL PROCEDURES

Table 1 summarizes the samples to be collected during this soil sampling program. A total of 13 to 15 soil samples will be collected for laboratory analysis. All other soil samples collected will be retained by WCC for a period of 90 days.

For the samples at the tar decanter area and the lime pit, the boreholes will be advanced by hollow-stem auger methods. No drilling fluids or additives will be used. All samples in these areas will be collected by split-spoon samplers. Decontamination procedures are discussed in a subsequent section. All boreholes will be visually logged to fully describe the subsurface materials. For the decanter area, field decisions regarding submittal of samples for analysis will be made by WCC with the concurrence of PDER, if present.

ANALYTICAL PROGRAM

The analytical program consists of laboratory analysis of 13 to 15 soil samples, as described above. The samples will be submitted to Compuchem Laboratories, Inc., Chapel Hill, North Carolina for analysis for the following portions of the U.S. Environmental Protection Agency's priority pollutant list:

- . volatile organics
- . acid extractable organics
- . base/neutral extractable organics

All samples will be submitted to the laboratory by overnight courier service.

QUALITY ASSURANCE/QUALITY CONTROL

DECONTAMINATION PROCEDURES

All drilling and sampling equipment will be carefully decontaminated to preclude cross-contamination of samples. All downhole drilling equipment (auger flights, rods, spoons, etc.) will be steam-cleaned between boreholes. All split spoons will also be steam-cleaned or subjected to a detergent wash between boreholes. All sample bottles used will be clean prior to use.

CHAIN-OF-CUSTODY

WCC will maintain custody of all samples until they are transmitted to the courier service for delivery to the laboratory. The chain of custody from sample collection to sample receipt at the laboratory will be documented on WCC'S Chain-of-Custody Record (Attachment A). Internal laboratory chain of custody will be handled by the laboratory.

FIELD TEST AND SAMPLE PRESERVATION

No field tests or preservation of the samples collected in this program will be required.

LABORATORY QA/QC

Like all EPA and state-certified laboratories, Compuchem Laboratories has strict QA/QC procedures. The results of the QA program for the samples collected in this program will be reported along with the results.

HEALTH AND SAFETY

All site work described in this work plan will be performed at U.S. EPA Level C protection, in accordance with WCC'S site-specific Health and Safety Plan.

REPORTING

Philadelphia Coke will submit the analytical results from this soil sampling program to PDER. A report describing the significance of the laboratory results will also be submitted. In addition, this report will include discussions of the groundwater quality data collected from the four on-site monitoring wells over the past four quarterly sampling episodes.

TABLE 1
SUMMARY OF SOIL SAMPLING PROGRAM
PHILADELPHIA COKE PLANT

<u>LOCATION</u>	<u>APPROXIMATE DEPTH (FT)</u>	<u>NO. OF SAMPLES</u>	<u>METHOD</u>
Decanter Tar Bottoms			
Lagoon	8, 10	8	HSA
Pits, inside	8	2*	HSA
Pits, outside	8	1	HSA
Tar Plains	1.5	2	Hand tools
Lime Pit		2	HSA
Total Samples		13-15	

HSA = Hollow-stem augers

*Analysis of samples from inside pits dependent on visual inspection

CHAIN-OF-CUSTODY RECORD

Woodward-Clyde Consultants
5120 Butler Pike
Plymouth Meeting, Pennsylvania 19462
(215) 825-3000

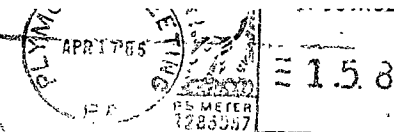
Project Number		Project Name		
Origination Date	Sample No.	Description	Collection Date	Remarks
Relinquished by: (Signature)		Date / Time	Received by: (Signature)	Remarks
Relinquished by: (Signature)		Date / Time	Received by: (Signature)	Remarks
Relinquished by: (Signature)		Date / Time	Received by: (Signature)	Remarks
Relinquished by: (Signature)		Date / Time	Received by: (Signature)	Remarks
Relinquished by: (Signature)		Date / Time	Received for Laboratory by: (Signature)	Remarks

Distribution: Original accompanies Shipment, Copy to Originator Files.

APR 18

ERA

APR 18



First Class Mail

Woodward-Clyde Consultants



EASTERN REGION
5120 BUTLER PIKE
PLYMOUTH MEETING
PENNSYLVANIA 19462

U.S. EPA Region III
841 Chestnut Street
Philadelphia, PA 19107

Attn: Harry Harbold (3HW11)

Eastern

JAN 17 1986

Eastern Gas and Fuel Associates
One Beacon Street
Boston, Massachusetts 02108
(617) 742-9200

DEPT. OF ENV. RES.

DER-RECEIVED
NORRISTOWN

JAN 21 1986

January 10, 1986

Mr. James A. Dolan
Solid Waste Specialist
Department of Environmental Resources
Bethlehem Office
Bethlehem, PA 18018

Re: Closure of Hazardous Waste
Management Facility
Philadelphia Coke, Inc.
PAD 000427906

Dear Mr. Dolan:

Your letter of November 15, 1985 arrived encased in a plastic envelope with an apologetic note from the U.S. Postal Service. Evidently, it had an adventurous trip from Bethlehem to Mesa, AZ.

Mr. Jacobson of Woodward-Clyde, and I are meeting at the coke plant site on Thursday, January 15, 1986 to discuss the location of shallow borings through and in the immediate vicinity of the former lagoons as requested in your letter.

We will be sending to you a detailed plan showing sample locations, intervals, methods, analytical methods and parameters, etc. After your review and approval of the plan, we will proceed.

I hope that your hydrogeologist did not mean to be taken literally when you said the sampling program was to be undertaken to ensure no residual contamination remains. (My emphasis.) That would pose an impossible goal. We assume he means no contamination that would significantly injure the environment; in this case, groundwater.

We have completed three quarters of sampling so far. Upon completion of the fourth and final round, we will submit an assessment of the first year's data with recommendations for further action.

Sincerely,

Jim
James L. Hogeboom
Project Manager

JLH:km



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

Bethlehem Office
520 East Broad Street
Bethlehem, PA 18018
861-2070

November 15, 1985

Re: Closure of Hazardous Waste
Management Facility
Philadelphia Coke
PAD000427906

Mr. James L. Hogeboom
Eastern Gas & Fuel Associates
P.O. Box 6561
Mesa, AZ 85206

Dear Mr. Hogeboom:

I am in receipt of your undated letter received in this office on October 15, 1985. One final point still needs to be addressed before we put this closure to rest. Our hydrogeologist still feels uncomfortable concerning soils under the closed impoundment. It is his contention that a soil sampling program must be undertaken to insure that no residual contamination remains. This would involve the drilling of a number of shallow soil borings through and in the immediate vicinity of the former lagoons. Soil samples should be collected at specific intervals from the borings and analyzed for waste related parameters. Results of these analyses will determine if further remedial measures are warranted. Full details regarding sample locations, intervals, methods, analytical methods and parameters, etc. should be provided. Please provide the above plan directly to me at this office.

If you have any questions, please give me a call.

Very truly yours,

James A. Dolan
Solid Waste Specialist

JAD/bal

CC: L. Lunsik
P. Rotstein
Division of Facilities Management
U.S. EPA Code 3HW33 ✓



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

RECEIVED
WASTE MGMT. BRANCH

SEP 13 1985

U.S. EPA, Region III

Bethlehem Office
520 East Broad Street
Bethlehem, PA 18018
861-2070

September 12, 1985

Re: Closure of Hazardous Waste
Management Facility
PAD000427906

Mr. James L. Hogeboom
Vice-President
Philadelphia Coke
4501 Richmond Street
Philadelphia, PA 19137

Dear Mr. Hogeboom:

The plan for the referenced closure dated June 1983 was reviewed and approved on December 13, 1983 with the condition that a ground-water monitoring plan be submitted to the Department. That plan, having been submitted, is hereby approved. In order that we may facilitate final closure, please execute the attached certifications and forward them to me. Upon their receipt, a final inspection will be scheduled and a final approval letter will be issued.

If you have any questions, please do not hesitate to call.

Very truly yours,

James A. Dolan
Solid Waste Specialist

JAD/bal

CC: L. Lusk
P. Rotstein
Division of Hazardous Waste Management
U.S. EPA Code 3HW33 ✓
Peter Kipin



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

Bethlehem Office
520 East Broad Street
Bethlehem, PA 18018
861-2070

September 12, 1985

Re: Closure of Hazardous Waste
Management Facility
PAD000427906

Mr. James L. Hogeboom
Vice-President
Philadelphia Coke
4501 Richmond Street
Philadelphia, PA 19137

Dear Mr. Hogeboom:

The plan for the referenced closure dated June 1983 was reviewed and approved on December 13, 1983 with the condition that a ground-water monitoring plan be submitted to the Department. That plan, having been submitted, is hereby approved. In order that we may facilitate final closure, please execute the attached certifications and forward them to me. Upon their receipt, a final inspection will be scheduled and a final approval letter will be issued.

If you have any questions, please do not hesitate to call.

Very truly yours,

James A. Dolan
Solid Waste Specialist

JAD/bal

CC: L. Luns
P. Rotstein
Division of Hazardous Waste Management ✓
U.S. EPA Code 3HW33
Peter Kipin

PC Permit?

RCRA FACILITY CLOSURE CHECKLIST

Facility Name: Philadelphia Coke

Facility Address: _____

Facility I.D. Number: PAD 00 042 7906

Type of Closure: Full ☒ Partial _____
504
503

Date Closure Plan Received: 6/27/83

Date of Public Notice: 7/5/83

Date Plan Approved: 12/13/83 GWM Plan app. 9/12/85

Date Inspected: 7/5/84

Date of Certification: _____

Date Facility Closed: _____

Facility Status: Generator _____ Transporter _____
facility closed TSD Only _____

Date Entered in HWDMS: _____

called 33/FC

Part B called 8/31/84

EPA Lead Person _____

State Lead Person _____

APR 16 1984



KIPIN INDUSTRIES, INC.

513 GREEN GARDEN ROAD, ALIQUIPPA, PENNSYLVANIA 15001

412/495-6200

April 13, 1984

James A. Dolan
Hazardous Waste Coordinator
Commonwealth of Pennsylvania
Department of Environmental Resources
1875 New Hope Street
Norristown, PA 19401

RE: Closure Plan
Philadelphia Coke Co., Inc.

Dear Mr. Dolan:

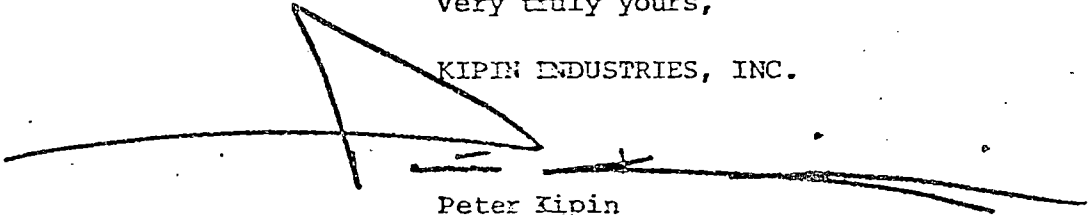
With reference to your letter dated March 30, 1984 requesting documentation outlining the disposition of the hazardous materials that were located at the Richmond Street site, please refer to the attached letter dated December 6, 1983 to Mr. Paul Popovich of your Harrisburg office. In that letter we have verified and have enclosed copies of the quarterly reports for all periods up to the date of final clean-up of all hazardous waste on-site. All hazardous waste activities were cleaned up and documentation was sent to Mr. Paul Popovich under the subject letter.

In regard to the groundwater monitoring program, we have notified your Mr. Phil Rothstein and Mr. Gary Bonner that implementation of groundwater monitoring will have to be delayed due to a discovery that the fire mains on-site were leaking and cannot be turned off during demolition. These would effect the groundwater readings since the water table is so close to the service. Near the end of demolition when the water mains can be turned off we would dig test holes to determine the appropriate locations of the wells and inform Mr. Rothstein of the start. Expected start date will be approximately May 5 to 15, 1984 at the earliest.

Should you have any questions, please call.

Very truly yours,

KIPIN INDUSTRIES, INC.



Peter Kipin
President

PK/im

Enclosures

c: Mr. Bruce Beitler, Field Supervisor
Division of Hazardous Waste Management w/enclosures
Mr. Jim Hogeboom, Philadelphia Coke Co., Inc.

Philadelphia Coke Company
4501 Richmond Street
Philadelphia, Pennsylvania 19137

(215) 743-3100

December 6, 1983

Commonwealth of Pennsylvania
Department of Environmental Resources
Bureau of Solid Waste
P.O. Box 2063
Harrisburg, Pennsylvania 17120

Attention: Mr. Paul Popovich

Subject: Quarterly Activity Reports

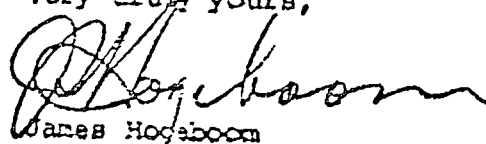
Dear Mr. Popovich:

In reviewing the Closure Plan with your Mr. Gary Bonner of your Norristown, Pennsylvania office it was noted that the shipment of waste off-site to the State of Maryland was in order but he had no record of notification to the Generator State.

To ensure that all paperwork is in order, we are enclosing Quarterly Reports for each period up to the date of final clean-up of the shut-down plant.

Should you have any questions, please contact Mr. Peter Kipin of Kipin Industries, Inc. The number is (412) 495-6200.

Very truly yours,


James Hodgeboom

cc: P. Kipin

Greg K.

Department of Environmental Resources
1875 New Hope Street
Morristown, PA 19401
215 270-1920

March 30, 1984

Mr. James L. Hogenboom, Vice President
Philadelphia Coke Company, Incorporated
4501 Richmond Street
Philadelphia, PA 19137

PDD 00 042 790.6

Re: Closure Plan
Philadelphia Coke Co., Inc.

Dear Mr. Hogenboom:

In order to assess the process of the subject closure, it is requested that you furnish this office with documentation outlining the disposition of the hazardous materials that were located at the Richmond Street site.

In a letter dated December 13, 1983, you were requested to submit a plan outlining a groundwater monitoring program. As of this date, no information has been received. Your attention is invited to 25 Pa. Code, Section 75.265(o) concerning time limits for closure of hazardous waste facilities.

Please provide the above information to this office within fourteen (14) days of receipt of this letter. If you have any questions please contact me at (215)270-1911.

Very truly yours,

JAMES A. DOLAN
Hazardous Waste Coordinator

cc: Bruce Reitler, Field Supervisor
Division of Hazardous Waste Management
U.S. EPA 3AU32 ✓
Re 30 ILS39

6

Sim

Carl Spadaro

Department of Environmental Resources

1875 New Hope Street
Morristown, PA 19401
215 631-2420

~~PAD 000 427 906~~

December 13, 1983

Mr. James L. Hogeboom, Vice President
Philadelphia Coke Company, Inc.
4501 Richmond Street
Philadelphia, PA 19137

*503
504*

~~PAD 000 427 906~~

file

Re: Closure Plan
Philadelphia Coke Company, Inc.

Dear Mr. Hogeboom:

The closure plan for your facility dated June 1983, has been reviewed by our staff and found to be acceptable, subject to the following provisions:

1. In order to assess possible groundwater contamination monitoring wells must be installed and a monitoring plan must be implemented.
2. The material to be disposed of on site, listed in Section 3.3.3.1, should include only coke breeze and Class I demolition debris.

Before final closure certification can be granted please submit, to this office, a plan outlining the number and location of monitoring wells that will accurately determine the existence or non-existence of groundwater contamination. Upon approval and implementation of this plan, final closure certification can be granted.

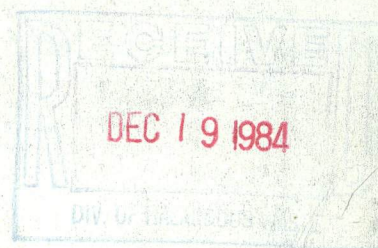
If you require any assistance concerning the requirements of the groundwater monitoring plan, please contact our staff hydrogeologist, Mr. Philip Rotstein, at 631-2413.

Very truly yours,

JAMES A. DOLAN
Hazardous Waste Coordinator

cc: G. Bonner
P. Rotstein
V. Janosik
Re 30 24 347.4

RECEIVED
STATE PROGRAMS SECTION
FEB 12 1985
U.S. EPA, REGION III



02 FEB REGION III

FEB 18 1989

LEB 18 1989
CIVIL ENGINEERING SECTION
RECEIVED

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FOR THE 000 000

100

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Department of Environmental Resources

1875 New Hope Street
Norristown, PA 19401
215 631-2420

DEC 19 1984

SEP 30 1984

July 5, 1983

Mr. Richard Zippin
Philadelphia Health Department
500 South Broad Street
Philadelphia, PA 19146

~~PAD 000 427 906~~
PAD 000 427 906
file

Re: Closure of Hazardous Waste Facility
Philadelphia Coke Company

Ph. Co.

Dear Mr. Zippin:

The Department of Environmental Resources has received a closure plan for the following hazardous waste management facility. The plan was submitted as required by Section 75.265(o) of the Solid Waste Management Rules and Regulations:

Philadelphia Coke Company, Inc.
4501 Richmond Street
Philadelphia, PA 19137

I have attached a copy of the subject closure plan for your review. If you wish to provide specific recommendations for this facility, please transmit those recommendations within 30 days of receipt of this closure plan. If the Department does not receive comments within the 30 day review period, we shall assume that you waived your right to review.

If you have any questions regarding this matter, please call Bruce Beitler at (215) 631-2425.

Very truly yours,

DAVID L. LASH
Regional Solid Waste Manager

cc: B. Beitler
L. Lush
Re: 1269

ATTACHMENT

RECEIVED
STATE PROGRAMS SECTION

FEB 12 1985

U.S. EPA, REGION III

BTB 12/20/85



Philadelphia Coke Co., Inc.
4501 Richmond Street
Philadelphia, Pennsylvania 19137
(215) 743-3100

November 1, 1982

Ms. Shirley Bulkin
RCRA Permit & Pesticide Section
U. S. Environmental Protection Agency
6th and Walnut Streets
Philadelphia, PA 19106

Dear Ms. Bulkin:

Enclosed find a copy of a recent letter detailing our closure and post-closure plans for Philadelphia Coke Co., Inc. (PAD #000427906). This copy is being sent to you at the suggestion of Mr. Victor Janosik of the Pennsylvania DER in Norristown.

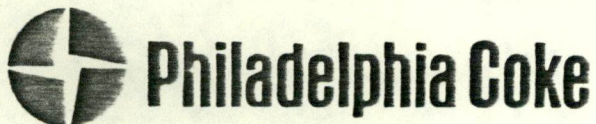
If you have questions, please let me know.

Sincerely,

James L. Hogeboom
Vice President, Operations

JLH:vp

Enc.



Philadelphia Coke

BTB 12/20
Philadelphia Coke Co., Inc.
4501 Richmond Street
Philadelphia, Pennsylvania 19137
(215) 743-3100

October 22, 1982

Mr. Gary Bonner
Department of Environmental Resources
1875 New Hope Street
Norristown, PA 19401

Dear Mr. Bonner:

Philadelphia Coke Co., Inc. (PAD 000427906) located at 4501 Richmond Street, Philadelphia, PA 19137, has terminated manufacturing operations and is in the process of closing its facility located at the above address. Coke production ceased at 9 a.m. on May 12, 1982.

In its foundry coke manufacturing process the company converted low sulfur metallurgical coal to coke and recovered various by-products. During the operation of the facility the company accumulated approximately 1,800 cubic yards of tar decanter waste and 2,766 cubic yards of spent iron oxide. The tar decanter has been impounded in three open pits, two of which are concrete lined, and one having an earthen bottom. One-third of the spent iron oxide has been removed and stored on an asphalt pad. The remaining two-thirds has remained in the oxide boxes. Both of these materials are considered to be hazardous wastes.

The company has contracted with Clean Venture, Inc. to dispose of these hazardous wastes. Clean Venture is currently in the process of removing these materials from the facility. The spent iron oxide and tar decanter waste are being mixed in a ratio of approximately 3:1 to make a manageable material that is stable. The mixed material will be transported by Tajon, Inc. and BFI to the Browning-Ferris secure landfill located at 7890 Solley Road, Glen Burnie, MD. Attached are a copy of the laboratory analysis of the mixed material, a copy of the BFI data sheet, and a copy of the letter of approval from the State of Maryland permitting the disposal of these materials at the BFI facility.

When the hazardous wastes have been completely removed and the oxide boxes and tar decanters have been satisfactorily cleaned the open pits will be partially filled with clean rubble and covered with clean fill dirt.

Gary Bonner

- 2 -

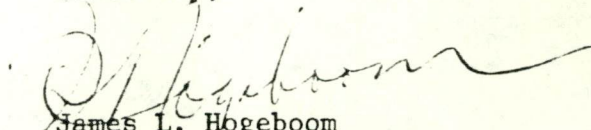
October 22, 1982

To ensure that the hazardous waste removal has been successfully completed, we have been working with Roy F. Weston Co., consultants, to review our situation and provide a ground water monitoring plan which will be submitted to the Department of Environmental Resources for approval. After receiving approval, the plan will be promptly implemented.

Records of the work performed, copies of the hazardous waste manifests and any other records relating to the removal of hazardous materials will be stored here until the final closing of the property and will then be transferred to the parent company, Eastern Gas and Fuel Associates, Boston, Massachusetts.

We will continue to keep you advised of our status.

Sincerely,


James L. Hogeboom
Vice President, Operations

JLH:vp

Enc.

Martel Laboratory Services, Inc.

1025 Cromwell Bridge Road

Baltimore, Maryland 21204

(301) 825-7790

Invoice Number 6739

Page 1 of 1 page(s)

Sample S-344 PO #J2550

Philadelphia Coke Co., Inc.
4501 Richmond St.
Philadelphia, Pa. 19137

September 2, 1982

Attn: James L. Hogeboom, Vice President - Operations

Total Organic Halogens (as Cl)	0.29%
Phenols	470 ppm
Naphthalene	5.6%
Endane	<0.01 ppm
Methoxychlor	<0.01 ppm
Endrin	<0.01 ppm
Toxaphene	<0.1 ppm
PCB's	<0.1 ppm
Reactivity	Negative
Corrosivity	
pH	7.7
Ignitability	
Flash Point	285°F
E P Toxicity	
Arsenic	<0.05 mg/l
Barium	<0.1 mg/l
Cadmium	<0.01 mg/l
Chromium	<0.02 mg/l
Lead	<0.02 mg/l
Mercury	<0.01 mg/l
Selenium	<0.01 mg/l
Silver	<0.02 mg/l
2, 4, -D	<0.1 mg/l
2, 4, 5-TP (Silvex)	<0.1 mg/l
Lindane	<0.01 mg/l
Methoxychlor	<0.01 mg/l
Toxaphene	<0.01 mg/l
Endrin	<0.01 mg/l



Robert G. Edwards, Ph. D.
Vice President

WASTE CHARACTERIZATION DATA

General Directions: In order for us to determine whether we can lawfully and safely transport, treat, and dispose of your waste material, we must obtain certain information about the chemical and physical properties of the waste and its chemical composition. Please be complete in your answers; your response is "none" or "not available", so indicate. Answers must be printed in ink or typewritten and the completed form must be signed. Please make a copy of this form for your records.

- 1.) Generator Name: Philadelphia Coke Co Inc and Clean Venture INC Date: 9/8/82
 2.) Generating Facility Complete Address: AS ITS AUTHORIZED AGENT
4501 RICHMOND AVE Phila Pa
 3.) Authorized Company Representative: James Hogeboom Title: V.P. OPERATIONS
 4.) Phone Number: (215) 743 3100
 5.) Emergency Contact: GARY WAGNER Title: VP CLEAN VENTURE Phone Number: (215) 743 3100

6.) General Description of The Waste: Deconter TAR + Spent IRON OXIDE

7.) Process Generating Waste: Plant Demolition + site clean-up (Coke operation)

8.) Anticipated volume: 4700 [] Gallons [☒] Tons [] Cubic Yards [] Drums, or [] Other
 Per: [] Day [] Week [] Month [] Year, or [] Other ONE TIME

- 9.) Waste Properties:
- (a.) Vapor pressure (in mm of Hg @ 25°C): NA
 - (b.) Flash Point: 7140 [☒] °F [] °C [] Closed Cup [] Open Cup
 - (c.) Phases/Layers: [☒] Single [] Bilayered [] Multilayer
 - (d.) Physical State @ 20 °C: [☒] Solid [] Liquid [] Semi-Solid [] Powder [] Other
 - (e.) Solubility (g/100g H₂O) @ 20 °C: NA
 - (f.) pH: 7.7
 - (g.) Density: 2.75 [☒] lb./ft.³ [] lb./gal [] Other
 - (h.) Odor: [] Strong [☒] Mild [] None
 - (i.) Reactivity:
 - Hydrophobic [] Yes [☒] No Autopolymerizable [] Yes [☒] No Shock Sensitive [] Yes [☒] No
 - Pyrophoric [] Yes [☒] No Thermally Sensitive [] Yes [☒] No Explosive [] Yes [☒] No

10.) Complete waste composition (with ranges - indicate % or ppm.) Attach Additional Pages if Necessary

ORGANIC	INORGANIC
<u>75% Deconter TAR</u>	<u>25% SPENT IRON OXIDE</u>

(The above is in a mixed state, SEE ATTACHED ANALYSIS FOR ROPE CAR ANALYSIS)

11.) Sample Included [☒] No

12.) Manifest Information

Proper USDOT Shipping Name

USDOT Hazard Class

UN or NA No.

USEPA Haz. Code

USEPA Haz. Waste No. (Type)

HAZARDOUS WASTE, Solid, NOS

ORM-E

NA 9189

T

K087

- 13.) Does this waste contain biological materials, pathogens or etiological agents? No If yes, please specify.
 14.) Have you obtained toxicity studies of this waste material? YES If so, please attach a copy of the results.
 15.) Required personnel protective equipment & procedures: Avoid prolonged contact with skin

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine, that no deliberate or willful omissions of composition or properties exists, and that all known or suspected hazards have been disclosed.

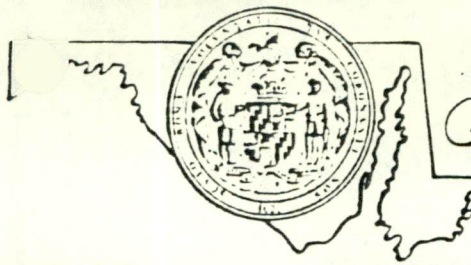
Generator's Authorized Signatory

James Hogeboom Title: V.P. OPERATIONS Date: September 8, 1982

Confidentiality Agreement: As consideration for the Generator's release of the above information and any other supplemental data, the undersigned agrees to treat such information as confidential property and will not disclose such information to others except as is required by law, and in such circumstances only after first giving notice to the Generator.

By: David L. Taylor Name BFI Representative
Adam assist Reg. Jals My Title

State of



Maryland

OFFICE OF ENVIRONMENTAL PROGRAMS

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

201 WEST PRESTON STREET • BALTIMORE, MARYLAND 21201 • Area Code 301 • 383-5734

Harry Hughes, Governor

Charles R. Buck, Jr., Sc.D. Secretary

September 14, 1982

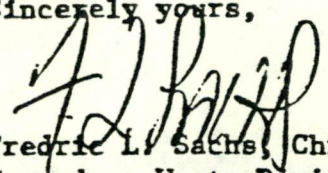
Mr. Darrell E. Taylor
Administrative Assistant
Regional Sales Manager
Browning-Ferris Industries
P. O. Box 8733
BWI Airport, Maryland 21240

Dear Mr. Taylor:

A review has been made of your request seeking authorization to dispose at the Solley Road Landfill a mixture of decanter tar and spent iron oxide. As previously stated, although this material is not pure decanter tar waste, it meets the provisions of COMAR 10.51.02.03 (2)(b) and therefore the mixture is a hazardous waste. It has also been determined that this waste does not contain constituents which would preclude its disposal at the Solley Road Landfill. Therefore, provided this waste does not contain free or "free standing" liquids and does not exhibit the characteristics of ignitability or reactivity as specified in COMAR 10.51.02.10 and .12, it may be placed in the Solley Road Landfill.

If you have any questions concerning the above matter, please contact Mr. Thomas Battle of my staff at the above number.

Sincerely yours,


Fredric L. Sachs, Chief
Hazardous Waste Division

FLS:TB:gr

cc: Mr. Ronald Nelson
Mr. Thomas Battle



Philadelphia Coke Co., Inc.
4501 Richmond Street
Philadelphia, Pennsylvania 19137
(215) 743-3100

November 9, 1983

Mr. Wayne L. Lynn
Regional Solid Waste Manager
Department of Environmental Resources
1875 New Hope Street
Norristown, PA 19401

Dear Mr. Lynn:

The Philadelphia Coke Company stopped all production operations on May 12, 1982. By the end of 1982 we had removed from the plant site about 4400 tons of hazardous waste. In June of this year we filed with the Norristown office of The Department of Environmental Resources a carefully prepared Closure Plan. We will have completed this work within a short time.

When we complete the work that is currently in progress we will have removed the last of the materials that Mr. Bonner and I feel could be a problem. It would seem to me that if there was a violation of the regulations, the cause of the violation will have been eliminated by the removal of the waste materials from the site. I do not believe the installation of wells is necessary.

If you need any further details on the work that has been done or, the work in progress, please call me. I should mention that Mr. Bonner is familiar with what we have done and what is in progress.

Sincerely,



James L. Hogeboom
Vice President



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

1875 New Hope Street
Norristown, PA 19401



DEPT-RECEIVED
NORRISTOWN

NOV 10 1983

October 27, 1983

Mr. R. Philemon Stout
Philadelphia Coke Company, Inc.
4501 Richmond Street
Philadelphia, PA 19137

NOTICE OF VIOLATION

Dear Mr. Stout:

The purpose of this letter is to provide you with notification that the above named facility has failed to comply with the groundwater monitoring requirements as provided by 25 Pa. Code Chapter 75.265(N). Specifically, the monitoring wells have not been drilled even though you functioned as a hazardous treatment, storage or disposal facility after November 19, 1980. These wells must meet RCRA standards. You are required to notify the Department in writing within 14 days regarding what steps are being undertaken to comply with Hazardous Waste Facilities Groundwater Monitoring Requirements at the above named facility. Failure to respond within the time specified could result in the assessment of penalties as provided by State Law.

Very truly yours,

Wayne L. Lynn

WAYNE L. LYNN
Regional Solid Waste Manager

WLL:rmn

cc: Regional Hydrogeologist
Field Supervisor

DESK MEMORANDUM

SUBJECT

TO

DATE SENT

FROM

DATE NEEDED

PLEASE CALL:	APPROVAL	SEE ME
RETURNED YOUR CALL	AS REQUESTED	COMMENT
<input checked="" type="checkbox"/> INFORMATION	PREPARE REPLY/REPORT	NOTE AND FILE

RECEIVED BY

DATE

TIME

ROUTE	INITIAL	DATE	ROUTE	INITIAL	DATE

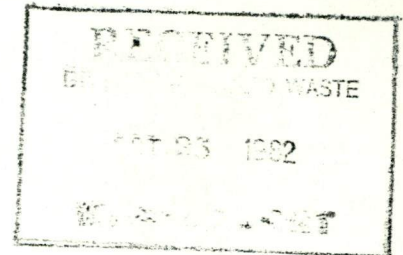
MESSAGE

Enclosed is a letter & other info. sent to Gary Bonner of this office regarding the closure of Philadelphia Coke Co., Inc.



Philadelphia Coke Co., Inc.
4501 Richmond Street
Philadelphia, Pennsylvania 19137
(215) 743-3100

October 22, 1982



Mr. Gary Bonner
Department of Environmental Resources
1875 New Hope Street
Norristown, PA 19401

Dear Mr. Bonner:

Philadelphia Coke Co., Inc. (PAD 000427906) located at 4501 Richmond Street, Philadelphia, PA 19137, has terminated manufacturing operations and is in the process of closing its facility located at the above address. Coke production ceased at 9 a.m. on May 12, 1982.

In its foundry coke manufacturing process the company converted low sulfur metallurgical coal to coke and recovered various by-products. During the operation of the facility the company accumulated approximately 1,800 cubic yards of tar decanter waste and 2,766 cubic yards of spent iron oxide. The tar decanter has been impounded in three open pits, two of which are concrete lined, and one having an earthen bottom. One-third of the spent iron oxide has been removed and stored on an asphalt pad. The remaining two-thirds has remained in the oxide boxes. Both of these materials are considered to be hazardous wastes.

The company has contracted with Clean Venture, Inc. to dispose of these hazardous wastes. Clean Venture is currently in the process of removing these materials from the facility. The spent iron oxide and tar decanter waste are being mixed in a ratio of approximately 3:1 to make a manageable material that is stable. The mixed material will be transported by Tajon, Inc. and BFI to the Browning-Ferris secure landfill located at 7890 Solley Road, Glen Burnie, MD. Attached are a copy of the laboratory analysis of the mixed material, a copy of the BFI data sheet, and a copy of the letter of approval from the State of Maryland permitting the disposal of these materials at the BFI facility.

When the hazardous wastes have been completely removed and the oxide boxes and tar decanters have been satisfactorily cleaned the open pits will be partially filled with clean rubble and covered with clean fill dirt.

Gary Bonner

- 2 -

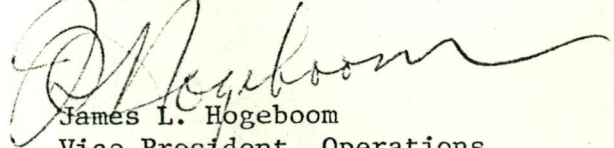
October 22, 1982

To ensure that the hazardous waste removal has been successfully completed, we have been working with Roy F. Weston Co., consultants, to review our situation and provide a ground water monitoring plan which will be submitted to the Department of Environmental Resources for approval. After receiving approval, the plan will be promptly implemented.

Records of the work performed, copies of the hazardous waste manifests and any other records relating to the removal of hazardous materials will be stored here until the final closing of the property and will then be transferred to the parent company, Eastern Gas and Fuel Associates, Boston, Massachusetts.

We will continue to keep you advised of our status.

Sincerely,



James L. Hogeboom
Vice President, Operations

JLH:vp

Enc.

Martel Laboratory Services, Inc.

1025 Cromwell Bridge Road

Baltimore, Maryland 21204

(301) 825-7790

Invoice Number 6739

Page 1 of 1 page(s)

Sample S-344 PO #J2550

Philadelphia Coke Co., Inc.
4501 Richmond St.
Philadelphia, Pa. 19137

September 2, 1982


Attn: James L. Hogeboom, Vice President - Operations

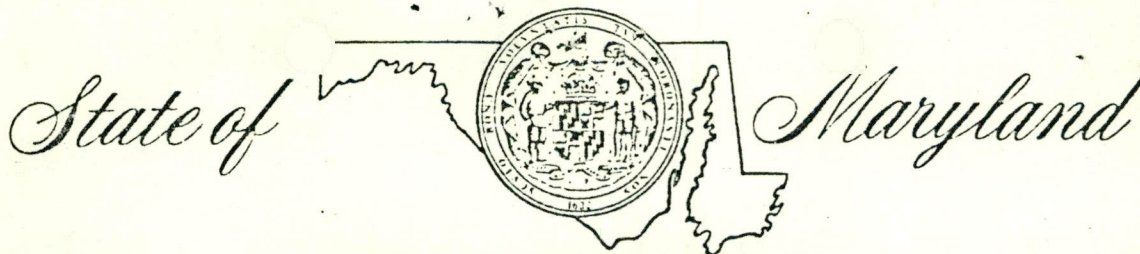
RECEIVED
DINWIDDIE WASTE

OCT 25 1982

RECEIVED

Total Organic Halogens (as Cl)	0.29%
Phenols	470 ppm
Naphthalene	5.6%
Indane	<0.01 ppm
Methoxychlor	<0.01 ppm
Endrin	<0.01 ppm
Toxaphene	<0.1 ppm
PCB's	<0.1 ppm
Reactivity	Negative
Corrosivity	
pH	7.7
Ignitability	
Flash Point	285°F
E P Toxicity	
Arsenic	<0.05 mg/l
Barium	<0.1 mg/l
Cadmium	<0.01 mg/l
Chromium	<0.02 mg/l
Lead	<0.02 mg/l
Mercury	<0.01 mg/l
Selenium	<0.01 mg/l
Silver	<0.02 mg/l
2, 4, -D	<0.1 mg/l
2, 4, 5-TP (Silvex)	<0.1 mg/l
Lindane	<0.01 mg/l
Methoxychlor	<0.01 mg/l
Toxaphene	<0.01 mg/l
Endrin	<0.01 mg/l


Robert G. Edwards, Ph. D.
Vice President



OFFICE OF ENVIRONMENTAL PROGRAMS

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

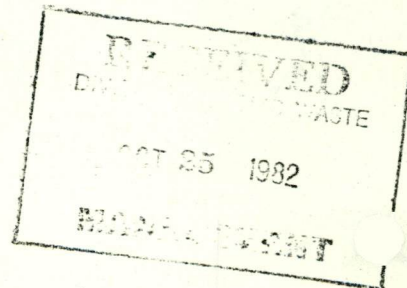
201 WEST PRESTON STREET • BALTIMORE, MARYLAND 21201 • Area Code 301 • 383-5734

Harry Hughes, Governor

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September 14, 1982

Mr. Darrell E. Taylor
Administrative Assistant
Regional Sales Manager
Browning-Ferris Industries
P. O. Box 8733
BWI Airport, Maryland 21240

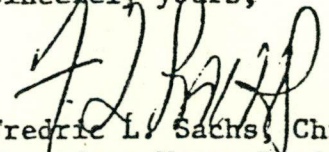


Dear Mr. Taylor:

A review has been made of your request seeking authorization to dispose at the Solley Road Landfill a mixture of decanter tar and spent iron oxide. As previously stated, although this material is not pure decanter tar waste, it meets the provisions of COMAR 10.51.02.03 (2)(b) and therefore the mixture is a hazardous waste. It has also been determined that this waste does not contain constituents which would preclude its disposal at the Solley Road Landfill. Therefore, provided this waste does not contain free or "free standing" liquids and does not exhibit the characteristics of ignitability or reactivity as specified in COMAR 10.51.02.10 and .12, it may be placed in the Solley Road Landfill.

If you have any questions concerning the above matter, please contact Mr. Thomas Battle of my staff at the above number.

Sincerely yours,


Fredric L. Sachs, Chief
Hazardous Waste Division

FLS:TB:gr

cc: Mr. Ronald Nelson
Mr. Thomas Battle

WASTE CHARACTERIZATION DATA

General Directions: In order for us to determine whether we can lawfully and safely transport, treat, and dispose of your waste material, we must obtain certain information about the chemical and physical properties of the waste and its chemical composition. Please be complete in your answers; your response is "none" or "not available", so indicate. Answers must be printed in ink or typewritten and the completed form must be signed. Please make a copy of this form for your records.

- (1.) Generator Name: Philadelphia COKE Co Inc and Clean Venture ^{INC} Date: 9/8/87
- (2.) Generating Facility Complete Address AS ITS AUTHORIZED AGENT
4501 RICHMOND AVE Phila Pa
- (3.) Authorized Company Representative: JAMES Hogeboom Title: V.P. OPERATIONS
- (4.) Phone Number: (215) 743 3100
- (5.) Emergency Contact GARY WAGNER Title VP CLEAN VENTURE Phone Number: (215) 743 3100
- (6.) General Description of The Waste: Decanter TAR + Spent IRON OXIDE
- (7.) Process Generating Waste: Plant Demolition + site clean-up (Coke operation)
- (8.) Anticipated volume 4700 [] Gallons [☒] Tons [] Cubic Yards [] Drums, or [] Other
Per: [] Day [] Week [] Month [] Year, or [] Other ONE TIME
- (9.) Waste Properties:
- (a.) Vapor pressure (in mm of Hg @ 25°C) NA
- (b.) Flash Point > 140 [] °F [] °C [] Closed Cup [] Open Cup
- (c.) Phases/layers: [☒] Single [] Bilayered [] Multilayer
- (d.) Physical State @ 20 °C: [☒] Solid [] Liquid [] Semi-Solid [] Powder [] Other
- (e.) Solubility (g/100g H₂O) @ 20 °C: NA
- (f.) pH 7.7
- (g.) Density: ~ 75 [☒] lb./ft.³ [] lb./gal. [] Other
- (h.) Odor: [] Strong [☒] Mild [] None
- (i.) Reactivity:
- Hydrophoric [] Yes [☒] No Autopolymerizable [] Yes [☒] No Shock Sensitive [] Yes [☒] No
- Pyrophoric [] Yes [☒] No Thermally Sensitive [] Yes [☒] No Explosive [] Yes [☒] No

- (10.) Complete waste composition (with ranges - indicate % or ppm.) Attach Additional Pages if Necessary

ORGANIC
75% Decanter TAR

INORGANIC
25% SPENT IRON OXIDE

the above is in a mixed state, see ATTACHED ANALYSIS FOR PROPER LAB ANALYSIS

- (11.) Sample Included [☒] No

- (12.) Manifest Information

Proper USDOT Shipping Name

USDOT Hazard Class

UN or NA No.

USEPA Haz. Code

USEPA Haz. Waste No. (Type)

HAZARDOUS WASTE,
Solid, NOS

ORM-E

NA 9189

T

K087

- (13.) Does this waste contain biological materials, pathogens or etiological agents? No If yes, please specify.

- (14.) Have you obtained toxicity studies of this waste material? YES If so, please attach a copy of the results.

- (15.) Required personnel protective equipment & procedures. Avoid prolonged contact with skin

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine, that no deliberate or willful omissions of composition or properties exists, and that all known or suspected hazards have been disclosed.

Generator's Authorized Signatory

J. Hogeboom

Title V.P. OPERATIONS

Date September 8, 1987

Confidentiality Agreement: As consideration for the Generator's release of the above information and any other supplemental data, the undersigned agrees to treat such information as confidential property and will not disclose such information to others except as is required by law, and in such circumstances only after first giving notice to the Generator.

By

Danell Taylor
Name BFI Representative

Title

Admin Assist Reg. Sales Mgr